

Title (en)

APPARATUS AND METHOD FOR WATERJET CUTTING

Title (de)

VORRICHTUNG UND VERFAHREN ZUM WASSERSTRAHLSCHNEIDEN

Title (fr)

APPAREIL ET PROCÉDÉ DE DÉCOUPE À JET D'EAU

Publication

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Application

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Priority

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Abstract (en)

[origin: WO2018060920A1] The invention relates to an apparatus for water jet cutting comprising: a water source (2); - pumping means (4), in communication with the water source, to generate a high pressure water flow; a tank (22) containing an abrasive material in suspension (21), in which said abrasive material in suspension comprises a fluid and abrasive particles dispersed homogeneously in said fluid; and - a cutting head (10) in fluid communication with said pumping means (4) and said tank (22) of the abrasive material in suspension (21), said cutting head comprising a mixing chamber (12); wherein said tank of the abrasive material in suspension (21) is in communication with said cutting head (10) by means of an abrasive inlet channel (23) and said cutting head is configured to generate a vacuum pressure that draws the abrasive material in suspension (21) through said abrasive inlet channel (23) toward the mixing chamber (12) to mix the abrasive material in suspension and the high pressure water and form a jet of water and abrasive (15). The invention further relates to a method for generating a water jet cut that can be implemented with the aforesaid apparatus.

IPC 8 full level

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Citation (search report)

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